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DOCUMENT-IDENTIFIER: US 6466986 B1
TITLE: Method and apparatus for providing dynamic host configuration protocol (DHCP) tagging

Abstract Text (1):
A method, apparatus, and system for providing dynamic host configuration protocol (DHCP) tagging for employing a DHCP server as a non-volatile repository. In one embodiment, the method includes tagging one or more messages from a client computer to the DHCP server with a media access control (MAC) address of a cable modem that is attached to the client computer for storing the MAC address as part of a lease record in the DHCP server. The method further includes receiving a request for the MAC address of the cable modem based on the Internet protocol (IP) address of the client computer from a remote device for transmitting packets to the client computer, obtaining the MAC address of the cable modem corresponding to the IP address of the client computer from the DHCP server, and transmitting the MAC address to the remote device. Consequently, the client computer's traffic through the remote device is directed to the client computer's cable modem.

Current US Original Classification (1):
709/245

US006466986B1

(12) **United States Patent**
Sawyer et al.

(10) **Patent No.:** **US 6,466,986 B1**
(45) **Date of Patent:** **Oct. 15, 2002**

(54) **METHOD AND APPARATUS FOR PROVIDING DYNAMIC HOST CONFIGURATION PROTOCOL (DHCP) TAGGING**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/475,388**

(22) Filed: **Dec. 30, 1999**

(51) Int. Cl.[7] G06F 15/173
(52) U.S. Cl. 709/245
(58) Field of Search 709/245, 230, 709/227, 223, 217

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(57) **ABSTRACT**

A method, apparatus, and system for providing dynamic host configuration protocol (DHCP) tagging for employing a DHCP server as a non-volatile repository. In one embodiment, the method includes tagging one or more messages from a client computer to the DHCP server with a media access control (MAC) address of a cable modem that is attached to the client computer for storing the MAC address as part of a lease record in the DHCP server. The method further includes receiving a request for the MAC address of the cable modem based on the Internet protocol (IP) address of the client computer from a remote device for transmitting packets to the client computer, obtaining the MAC address of the cable modem corresponding to the IP address of the client computer from the DHCP server, and transmitting the MAC address to the remote device. Consequently, the client computer's traffic through the remote device is directed to the client computer's cable modem.

24 Claims, 5 Drawing Sheets